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Preface

The Climate Monitoring and Diagnostics Laboratory (CMDL) is located in Boulder, Colorado, with Baseline Observatories in Barrow, Alaska; Trinidad Head, California; Mauna Loa, Hawaii; Cape Matatula, American Samoa; and South Pole, Antarctica. It is one of twelve research components within the Office of Oceanic and Atmospheric Research (OAR) of the National Oceanic and Atmospheric Administration (NOAA). CMDL conducts research related to atmospheric constituents capable of forcing change in the climate of the Earth through modification of the atmospheric radiative environment, for example, greenhouse gases and aerosols, and those that can cause depletion of the global ozone layer, e.g., chlorine- and bromine-containing compounds. The Trinidad Head Observatory was added in April 2002 to provide information on atmospheric composition and air quality in air flowing onto the west coast of the United States.

This report is a summary of CMDL activities for calendar years 2002 and 2003. It is the 27th consecutive report issued by this organization and its Geophysical Monitoring for Climatic Change predecessor since formation in 1972. From 1972 through 1993 (numbers 1 through 22), reports were issued annually; thereafter, the reports were issued on a biennial basis. At CMDL's Internet home page (www.cmdl.noaa.gov) you will find information about our major groups and observatories, the latest events and press releases, publications, data availability, and personnel. Numerous data graphs and ftp data files are available. Information (program descriptions, accomplishments, publications, plans, data access, etc.) on CMDL parent organizations can best be obtained via the Internet (OAR: www.oar.noaa.gov; NOAA: www.noaa.gov).

This report is organized into the following major sections:

1. Observatory Operations and Meteorology
2. Carbon Cycle
3. Aerosols and Radiation
4. Ozone and Water Vapor
5. Halocarbons and other Atmospheric Trace Species
6. Cooperative Programs

These are followed by a list of CMDL staff publications for 2002-2003.

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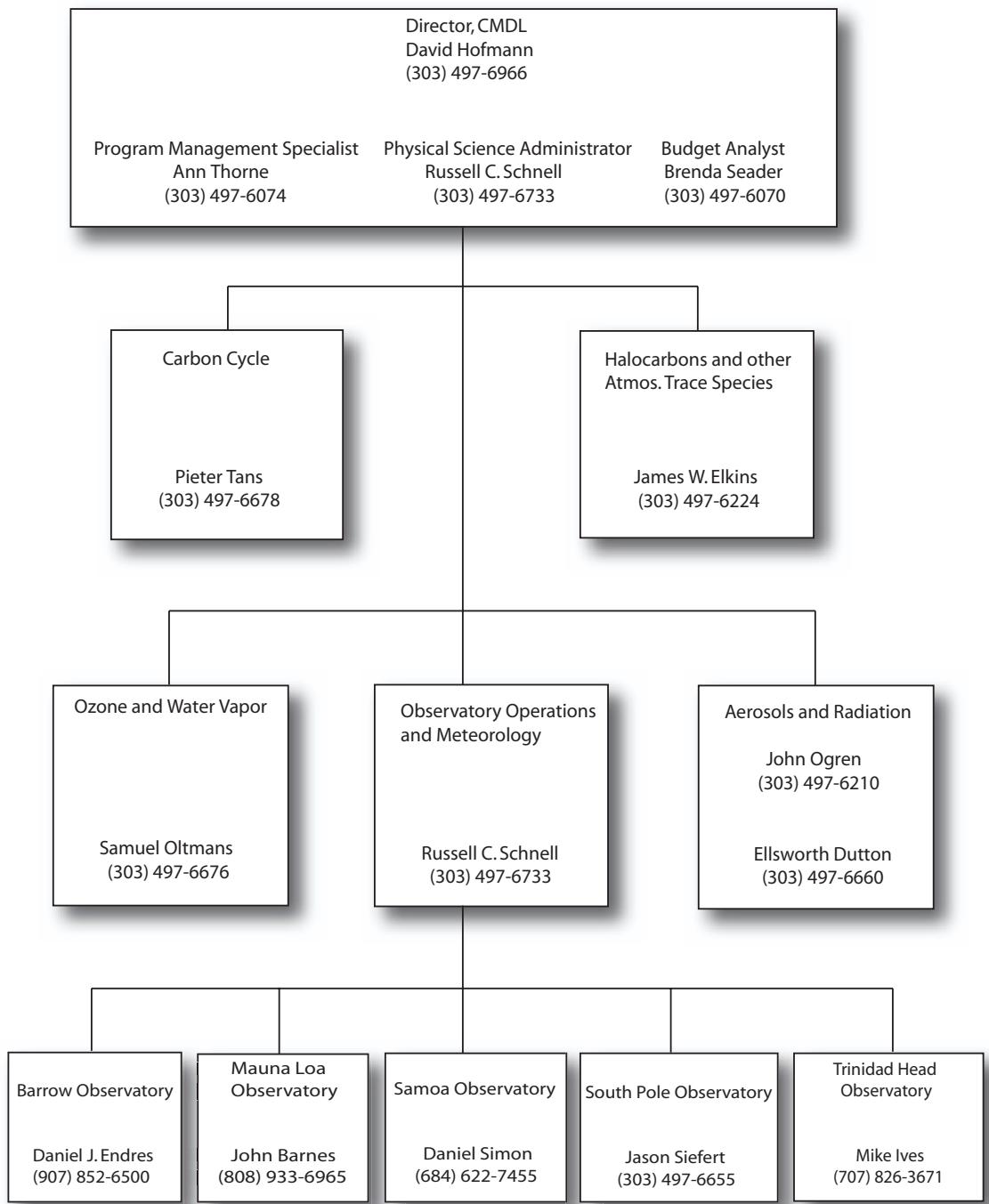
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CMDL Organization, 2003

The CMDL organization structure features five research areas organized according to scientific discipline as follows: (1) Carbon Cycle; (2) Halocarbons and other Atmospheric Trace Species; (3) Ozone and Water Vapor; (4) Aerosols and Radiation; and (5) Observatory Operations. At the end of 2003, the laboratory staff consisted of 51 Civil Service personnel (excluding part-time Physical Science Technicians), 37 CIRES/University of Colorado personnel, and 2 NOAA Corps officers, as well as several contractors, visitors, and people on special appointments.



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Wendy Snible, CIRES
Thayne Thompson, Physicist

CMDL Station Information

Name:	Barrow (BRW)	Mauna Loa (MLO)
Latitude:	71.323°N	19.539°N
Longitude:	156.609°W	155.578°W
Elevation:	11 m	3397 m
Time Zone:	GMT - 9	GMT - 10
Office Hours:	8:00 am-5:00 pm	8:00 am-5:00 pm
Phone during Ofc. hours:	(907) 852-6500	(808) 933-6965
Fax:	(907) 852-4622	(808) 933-6967
Postal Address:	Officer in Charge NOAA CMDL Box 888 Barrow, AK 99723	U.S. Dept. of Commerce NOAA - Mauna Loa Observatory, Rm. 202 P.O. Box 275 Hilo, HI 96721
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Name:	Samoa (SMO)	South Pole (SPO)
Latitude:	14.232°S	89.997°S
Longitude:	170.563°W	102.0°E
Elevation:	77 m	2837 m
Time Zone:	GMT - 11	GMT + 12
Office Hours:	8:00 am-5:00 pm	8:00 am-5:00 pm
Phone during Ofc. hours:	011 (684) 622-7455	Relayed through CMDL Boulder
Phone after hours:	011 (684) 258-2847	
Fax:	011 (684) 622-7455	
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Freight Address:	Same as above	Same as above for items going all the way to the South Pole by aircraft.
Name:	Trinidad Head (THD)	Large or heavy shipments sent by ship to McMurdo and then by aircraft to the South Pole use:
Latitude:	41.05°N	NSF Contractor Representative BLDG 471 - North End
Longitude:	124.151°W	USN - CBC
Elevation:	107 m	Port Hueneme, CA 93043
Time Zone:	GMT - 8	ATTN: USAP - NPX
Office Hours:	9:00 am-5:00 pm	Station Project code: DR3
Phone during Ofc. hours:	(707) 826-3671	Grantee Name: Hofmann
Fax:	(707) 826-3682	Event Number: 00-257-0
Postal Address:	NOAA CMDL Telonicher Marine Laboratory Humboldt State University Arcata, CA 95524	ROS: Vessel (date to be at site)
Freight Address:	NOAA CMDL 590 Ewing Trinidad Head, CA 95570	